

## **REMARKS**

The Examiner is thanked for the performance of a thorough search. By this amendment, Claims 1–2, 4–5, 7, 10, 14, 16–20, 22–24, 27, and 29–47 have been amended. Hence, Claims 1–47 are pending in this application. The amendments to the claims do not add any new matter to this application. Furthermore, the amendments to the claims were made to improve the readability and clarity of the claims and not for any reason related to patentability. All issues raised in the Office Action are addressed hereinafter.

### I.     OBJECTIONS TO THE SPECIFICATION & DRAWINGS

#### A.     Objection to Background of the Invention

Paragraph [0002] of the Specification stands under objection. Specifically, Applicants have been requested to remove the paragraph because, according to the Office Action, it “is not the background of the invention.” Applicants respectfully traverse the objection.

The Office Action provides no legal basis for the objection, and Applicants are unaware of any such legal basis. In fact, language such as that found in paragraph [0002] has been conventional in patent applications for years. *See, e.g.*, U.S. Patent No. 6,823,347; U.S. Patent No. 6,863,032; U.S. Patent No. 7,272,822.

To the extent that Applicants have been requested in relation to paragraph [0002] “provide information and/or prior arts that have led to the invention” under 37 C.F.R. § 1.105, to the best of Applicants’ knowledge, Applicants possess no pertinent information that is not already of record. Applicants have previously provided the Office with an Information Disclosure Statement for all prior art of which Applicants are aware. The submitted references, when considered in whole with the information contained in the section of the Specification entitled “Background of the Invention,” are more than reasonably sufficient to allow the Examiner “to properly examine or treat the matter.” 35 C.F.R. § 1.105. Applicants are not aware of prior art that “led to the invention,” because the invention represents an advancement over the art.

To the extent that the requirement seeks “information . . . that may have led to the invention” that does not qualify as prior art under 37 C.F.R. §§ 1.56, 1.97, or 1.98, applicants

object to the request as overbroad and seeking trade secrets and/or confidential information of the Applicants or their assignee, and request citation of authority that entitles the Government to such information.

It is therefore submitted that the disclosure of the application is in an allowable state. Applicants respectfully request removal of the objection.

#### B. Objection to Title

The title of the application, “Approaches For Capturing Illegal and Undesired Behavior in Network Components and Component Interactions,” stands under objection. The Office Action states that a new title is required because the present title is not descriptive. Specifically, the Office Action states that “Approaches for...” is not permitted, and that “Illegal and Undesired Behavior” is subjective and therefore not descriptive. Applicants respectfully traverse the rejection.

Applicants are unaware of any legal basis for the Office Action’s assertion that “approaches for” is not permitted language in the title of a patent. Nor does the Office Action provide such a legal basis. In fact, according to the Office’s own database, there are almost 600 issued patents whose titles contain the word “approach.” Applicants request that Examiner provide a citation of authority supporting the objection for the term “approaches for.”

Applicants disagree that “Illegal and Undesirable Behavior” is subjective and not descriptive. In fact, the plain and ordinary meaning of the words *illegal* and *undesirable* in relation to *behavior* are readily apparent. For example, the American Heritage Dictionary provides the following definition for *illegal*: “Prohibited by official rules.” THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (4th ed., 2004), available at <http://dictionary.reference.com/browse/illegal>. One skilled in the art would readily recognize that the behavior of components on a computer network is governed by a series of rules, including rules defined by protocols, users, hardware, and software. The same dictionary defines *undesirable* as: “Not wanted.” ID., available at <http://dictionary.reference.com/browse/undesirable>. One skilled in the art would likewise recognize that network administrators and/or network components do not want certain behaviors on their networks, including behaviors that may still be legal. Of course, the exact parameters of

the prohibited and unwanted behaviors may vary depending on the needs of the network's administrator and components.

The meaning is further clarified by the disclosure as a whole. For instance, paragraph [0057]–[0059] explains that states, state transitions, and composite state transitions “may be specified.” These states, state transitions, and composite state transitions may be used by, for instance, a network administrator or network component to characterize network behaviors. *See, e.g., ¶ [0032]* (“States can be defined by the establishment of thresholds. . . . A threshold is a value for one or more state variables that reflects a condition in one or more network components or a condition in one or more interactions between network components.”). The states, state transitions, and composite state transitions may then be “identified as desirable, undesirable or illegal.” ¶¶ [0057]–[0059].

There are, of course, a large variety of ways different behaviors may be identified as illegal or undesirable, but once these behaviors have been so identified by protocols, users, hardware, or software, the behaviors are clearly definite. For instance, a network administrator may establish a rule that no unauthenticated user may access a particular network component. The network administrator (or the network component itself) may specify, as a state, the occurrence of any unauthenticated access to that particular network component. This specified state may then be identified as illegal, thus definitively establishing any unauthenticated access to the particular network component as illegal behavior.

Thus, illegal and undesirable behaviors are those behaviors, as characterized by states, state transitions, or composite state transitions, that have been identified as being “prohibited by rules” or “not wanted.” As both plain meaning and the disclosure itself suggest, the term “illegal and undesirable behaviors” is both definite and descriptive to a person of ordinary skill in the art.

For the foregoing reasons, Applicants submit that the title of the application is proper. Applicants respectfully request removal of the objection.

### C. Objection to Abstract

The abstract of the application stands under objection. Specifically, the Office Action advises Applicants that the abstract should include “that which is new” to the art, should be “directed to the entire disclosure,” and should mention “by way of example the preferred modification or alternative.” Applicants respectfully traverse the objection.

The Office requires that the abstract contain no more than 150 words. Under that requirement, Applicants have provided a clear and concise statement of that which is new to the art. It is not possible for the abstract to be “directed to the entire disclosure” yet still contain 150 words or less. Yet Applicants have strived to include important features from throughout the entire disclosure, and have even attempted to include specific embodiments by way of example.

The Office Action alleges that the abstract “fails to show ‘of what’ the state and state transition is.” However, the abstract, on its face, states that the state and state transition are of “one or more components or interactions between components.”

The Office Action also alleges that the abstract “fails to show . . . what is illegal versus legal, what is undesired versus desired, claimed threshold, polling, authorization violation, forgery, non-graceful QoS degradation, etc.” Applicants have already shown in section I.B above that ordinary and plain meaning makes clear “what is illegal versus legal” and “what is undesired versus desired.” Regarding the “claimed threshold,” Applicants are unclear as to the Office Action’s meaning. Applicants’ lay no claim upon any particular threshold; rather thresholds are described as a way of delineating states and state transitions. As for thresholds in general, along with “polling, authorization violation, forgery,” and “non-graceful QoS degradation,” these technologies and their implicit relation to “capturing . . . behavior of network components” are well known in the art and do not require explanation. As explained in MPEP 608.01(b)(E), “[b]ackground knowledge of the art and an appreciation of the applicant’s contribution to the art are most important in the preparation of the abstract.” The Office must therefore assume background knowledge of the art when evaluating a patent’s abstract. It is not the purpose of a patent application or its abstract to describe in detail that which is already known in the art.

The Examiner is welcome to suggest specific improvements to the abstract. However the abstract, as it stands, sufficiently enables the Office and the public to “determine quickly . . . the nature and gist of the technical disclosure.” 37 C.F.R. § 1.72. The abstract is therefore allowable. Applicants respectfully request removal of the objection.

#### **D. Objection to Drawings**

Applicants’ drawings stand under objection. Again, the Office Action advises Applicants that “the figures do not show ‘of what’ the state and state transition is, the claimed threshold,

polling, authorization violation, forgery, non-graceful QoS degradation, etc.” Applicants traverse the objection.

According to 37 C.F.R. § 1.81, Applicants are required to “furnish a drawing of [their] invention where necessary for the understanding of the subject matter sought to be patented.” Applicants are unaware of any contrary authority that would have them submit a drawing for technology that is already well-understood in the art just because that technology is mentioned in the application. Neither does the Office Action suggest authority for its requirement for new drawings.

Regarding states and state transitions, the use of state machines to describe behaviors is well known in the art. The context of the states and state transitions in Applicants’ drawings is clear from the disclosure—the states and state transitions are of “components or interactions between two or more components.” *See, e.g.*, ¶ [0030]. FIG. 2 and FIG. 3 graphically depict states and transitions. Applicants’ depictions of states and state transitions are consistent with other drawings of state machines in the art, and it is not clear that there is any more specific way to depict states and state transitions.

Regarding “the claimed threshold,” Applicants are unclear as to the Office Action’s meaning. Applicants lay no claim upon any particular threshold; rather thresholds are described as a way of delineating states and state transitions. As for thresholds in general, along with “polling, authorization violation, forgery,” and “non-graceful QoS degradation,” these technologies are well known in the art.

Since the Office Action only requests new drawings to depict features that are well known in the art, and not to depict features that are “necessary for the understanding of the subject matter sought to be patented,” the Office cannot properly require corrective drawings at this time. Should Examiner require assistance in understanding the technologies mentioned in the objection, Applicants suggest the Examiner consult a Computer Science and/or Networking dictionary.

Applicants thus submit that their drawings are in a condition for allowance. Removal of the objection is requested.

## II. CLAIM OBJECTIONS

Claims 30–47 stand under objection for the use of the term “a computer” instead of “the computer” each claim’s preamble. Present Claims 30–47 recite “the computer” and therefore the objection is fully addressed. Removal of the objection is requested.

## III. CLAIM REJECTIONS BASED ON 35 U.S.C. § 101

Claims 1–47 stand rejected under 35 U.S.C. § 101 as allegedly directed towards non-statutory subject matter. The rejection is respectfully traversed.

The Office Action gives several specific reasons for the rejection, each of which is discussed below.

### A. Conditional language (Claims 1–19, 29–47)

Claims 1–19 and 29–47 stand rejected for using conditional language. In particular, the Office Action cited the use of “if” language in the last clauses of independent Claims 1 and 29. The relevant clauses of present Claims 1 and 29 now omit this conditional language, instead reading:

**when** a particular component or interaction between a particular two or more components enters a particular state or state transition . . .

Claims 1 and 29 are now therefore compliant with 35 U.S.C. § 101. Additionally, Claims 2–19 and 30–47, which are dependent on Claims 1 and 29, are compliant with 35 U.S.C. § 101 for the same reason. Removal of the rejection as to these claims is requested.

### B. Components not limited to Hardware (Claims 20–28)

Claims 20–28 stand rejected for containing components that are not limited to hardware. The Office Action does not mention which components are problematic under 35 U.S.C. § 101. Applicants submit that the 35 U.S.C. § 101 rejection as to any of Claims 20–28 is improper. Applicant is unaware of any authority that states that each component of a claim must be hardware. The guidelines under MPEP 2106 say nothing of non-hardware components being *per*

*se* unpatentable under 35 U.S.C. § 101. The guidelines require only a “useful, tangible, and concrete result.” The Office Action does not allege that Claims 20–28 are directed towards subject matter that does not provide a “useful, tangible, and concrete result.” The Office has not met its burden of making a *prima facie* case of unpatentability. *See* MPEP 2106(IV)(D) (“The examiner bears the initial burden … of presenting a *prima facie* case of unpatentability.”) (*quoting* In re *Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992)).

Claims 20–28 are patentable under 35 U.S.C. § 101. Independent Claims 20 and 27 both have many useful, tangible, and concrete results. For instance, they provide a network management system that is configured to receive notifications or reports of notifications in networks.

However, solely for the purposes of advancing prosecution and administrative efficiency, Claims 20–28 presently recite a “computer-based” system, indicating that the components, while not necessarily hardware in and of themselves, may reside on hardware.

Applicants believe the present claims fully overcome the rejection. Reconsideration is respectfully requested.

### C. Computer Storage Medium (Claims 29–47)

Claims 29–47 stand rejected because they are not directed towards computer **storage** medium. Applicants disagree with the basis of the rejection; however, solely for the purposes of advancing prosecution and administrative efficiency, Claims 29–47 presently recite a “computer-readable storage medium.”

Applicants believe the present claims fully overcome the rejection. Reconsideration is respectfully requested.

## IV. CLAIM REJECTIONS BASED ON 35 U.S.C. § 112

Claims 1–47 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. The rejection is respectfully traversed.

The Office Action cites to a large number of phrases and terms, each of which is discussed below.

#### A. Omission of Essential Steps, Elements, or Relationships (Claims 1–47)

Relying on MPEP § 2172.01, the Office Action rejected Claims 1–47 generally for “omitting essential steps/elements/structural cooperative relationships of elements.” The Office Action mentions seven specific omitted elements: “1) ‘of what’ the state and state transition is; 2) what is illegal versus legal; 3) what is undesired versus desired; 4) ‘of what’ the behavior is; 5) specifying of both what is legal and what is illegal; 6) specifying of both what is undesired and what is desired; 7) steps that perform the capturing of the claimed capturing.”

The rejection is unsupported and should be withdrawn. Neither MPEP § 2172 nor any other part of the MPEP has ever been adopted as a rule through an administrative rulemaking proceeding and cannot provide a basis for rejection. MPEP § 2172.01 states:

Unclaimed Essential Matter: A claim which omits matter disclosed to be essential to the invention as described in the specification or in other statements of record may be rejected under 35 U.S.C. 112, first paragraph, as not enabling. In re Mayhew, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). See also MPEP Section 2164.08(c). Such essential matter may include missing elements, steps or necessary structural cooperative relationships of elements **described by the applicant(s) as necessary to practice the invention.** In addition, a claim which fails to interrelate essential elements of the invention as defined by applicant(s) in the specification may be rejected under 35 U.S.C. 112, second paragraph, for failure to point out and distinctly claim the invention. See In re Venezia, 530 F.2d 956, 189 USPQ 149 (CCPA 1976); In re Collier, 397 F.2d 1003, 158 USPQ 266 (CCPA 1968). (emphasis added)

This section sets forth grounds for two distinct types of rejections: (1) a 112 first paragraph (enablement) rejection for claims that omit essential matter, and (2) a 112 second paragraph rejection for claims that fail to interrelate essential elements. *The Gentry Gallery Inc. v. The Berkline Cor.* 45 USPQ2d 1498 (Fed. Cir. 1998) (hereinafter GENTY), a relatively recent case, sets forth grounds for a third type of rejection that is related to those cited in MPEP 2172.01. Specifically, GENTRY held invalid under 112 first paragraph (written description) certain claims that did not recite the **location** of a claimed element, because the applicant had urged at numerous places outside the claims that the location of the element was essential to the invention.

## THE OMITTED ELEMENT CASES

It is the right and responsibility of the Applicant, not the USPTO, to specify what the Applicants believe to be the metes and bounds of the invention. In general, the claims are the mechanism by which the Applicants communicate the metes and bounds of the invention to the Office (and ultimately to the public):

...when the first paragraph speaks of “the invention”, it can only be referring to that invention which the applicant wishes to have protected by the patent grant, i.e., the *claimed* invention. For this reason the claims must be analyzed first in order to determine exactly what subject matter they encompass. **The subject matter there set out must be presumed, in the absence of evidence to the contrary, to be that “which the applicant regards as his invention.”**

*In re Moore and Janoski*, 169 USPQ 236, 238, (CCPA 1971) (emphasis added). However, in certain cases, some applicants have participated in the unwise practice of rigidly and emphatically stating, at locations other than in the claims, the metes and bounds of their invention. When such statements have been made outside the claims, the applicants have not been allowed claims that contradict the statements.

The “omitted essential element” ground of rejection, therefore, hinges on the existence of **statements made by the applicant that prove that what is recited in the claims is not the invention**. In MAYHEW, this evidence involved statements made in the Specification that the functions of certain claimed elements **were only made possible** by the existence of another element that was omitted from the claims.<sup>1</sup> In GENTRY, this evidence involved statements in the Specification that **the only possible location** for a claimed element was at a particular location, where the claims failed to recite that the claimed element was at that particular location.<sup>2</sup>

Thus, the “omitted essential element” ground of rejection is similar to estoppel in that it prevents an applicant from making assertions that contradict previously-made statements. In particular, it prevents an applicant from asserting, implicitly through the claims, that the

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<sup>1</sup> “Although appellant now strenuously argues that the cooling bath is optional, his specification not only fails to support this contention, but leads us, as it did the examiner and board, to believe that both it and its location are essential.” MAYHEW at 358.

invention has one set of metes and bounds, when the applicant has already clearly stated elsewhere that the invention necessarily has a different set of metes and bounds.

It is respectfully submitted that the present rejection of Claims 1–47 constitutes an erroneous application of the “omitted essential element” law. Specifically, the Applicants have not made any statements whatsoever to indicate that the invention recited in Claims 1–47 is not what the Applicants consider to be the invention. Nor have the Applicants stated that the elements recited in Claims 1–47 would be impossible to implement in the absence of elements that are not recited in Claim 1–47.

Further, the Office Action fails to identify any statement in the Specification, or made by the Applicant elsewhere, that even remotely implies that the invention recited in Claim 1 could not be practiced in the absence of unclaimed elements. Therefore, any attempt to force such unclaimed elements into Claim 1 would be unduly narrow the claim.

For the reasons given above, it is respectfully submitted that Claims 1–47 are not missing any elements that are essential to practicing the invention that is recited in Claims 1–47. Further, the metes and bounds of the invention set forth in Claims 1–47 do not contradict any statements about the invention elsewhere. Rather, Applicants go to great effort to refrain from making any statements about the invention (as opposed to embodiments thereof) outside the claims themselves, since at best such statements are innocuously redundant with the claims, and at worst they are confusingly contradictory with the claims. Removal of the rejection to Claims 1–47 is therefore requested.

#### **APPLICANTS’ CLAIMS 1–47**

While the Office Action complains of omitted “structural connections,” the Office Action does not state specific issues about the interrelation between essential elements. Rather, the Office Action appears to be asking Applicants to define the terms Applicants use within the claims.

Claims 1–47 are allowable under 35 U.S.C. § 112, second paragraph, because Applicants particularly point out and distinctly claim the subject matter which the applicant regards as the invention. The context for the terms “states and state transitions” and “behavior” is clear on the

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<sup>2</sup> “In this case, the original disclosure clearly identifies the console as the only possible location for the controls.” GENTRY at 1503.

face of the claims—both “behavior” and “states and state transitions” are **of components or interactions between two or more components**. Furthermore, this context is repeatedly established throughout the disclosure. *See MPEP 2173.01* (Applicants can use in the claims “whichever terms they choose so long as any special meaning assigned to a term is clearly set forth in the specification.”).

Regarding “what is illegal versus legal” and “what is undesired versus desired,” as stated in section I.B above, ordinary and plain meaning makes clear “what is illegal versus legal” and “what is undesired versus desired.” Furthermore, the meaning of *illegal* and *undesirable* is well-known within the art. Finally, a foundation for the terms *illegal* and *undesirable* has been repeatedly established throughout the specification.

Regarding the “specifying of both what is legal and what is illegal” and the “specifying of both what is undesired and what is desired,” one skilled in the art will recognize that there are a large variety of techniques that may be employed to make such specifications. These techniques are well-known, and are not the “subject matter which [Applicants] regard[] as the invention.”

Regarding “steps that perform the capturing of the claimed capturing,” Applicants are unclear on the Office Action’s intended meaning. The disclosure does not address performing “the capturing of the claimed capturing.” Applicants assume the Office Action was intended to read “steps that perform the capturing of illegal and undesired behavior,” yet “capturing of illegal and undesired behavior” is merely part of the preamble to each claim, and not an actual step. In other words, the method accomplished by the disclosed steps (or the functionality exposed by the claimed systems and computer-readable media) are useful to capture illegal and undesired behavior on a network.

For at least these reasons, Applicants submit that there are no omitted essential steps, elements, or structural cooperative relationships. Reconsideration is respectfully requested.

## B. The term “Illegal and Undesirable Behavior” (Claims 1–47)

The Office Action also alleges that “illegal and undesired behavior” in claims 1–47 is a relative term, rendering the claim indefinite. Again, Applicants disagree.

The Office’s guidelines in MPEP 2173.02 state that:

Definiteness of claim language must be analyzed, not in a vacuum, but in light of:

- (A) The content of the particular application disclosure;
- (B) The teachings of the prior art; and
- (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

Applicants have already shown in section I.B above that ordinary and plain meaning makes clear that illegal and undesirable have clear and definite meanings. Furthermore, the meaning of *illegal* and *undesirable* is well-known within the art. Finally, a foundation for the terms *illegal* and *undesirable* has been repeatedly established throughout the specification.

For at least these reasons, Applicants submit that *illegal* and *undesirable* are not relative terms and that Claims 1–47 are therefore not indefinite. Reconsideration is respectfully requested.

#### **C. The term “Nongracefully” (Claims 16 & 44)**

The Office Action complained of the word “nongracefully” in Claims 16 and 44. Although one skilled in the art would readily recognize a definite meaning for the word *nongracefully*, present Claims 16 and 44 recite to “sudden QoS degradation” instead. Applicants consider *sudden* and *nongracefully* to be equivalent terms in the context of QoS degradation, both of which are well known in the art.

Claims 16 and 44, in their present states, are clear and definite. Reconsideration is respectfully requested.

#### **D. The term “A Said State” (Claims 1–19, 29–47)**

The Office Action cited to the use of “a said state” in Claims 1–19 and 29–47 as a basis for the 35 U.S.C. § 112 rejection. These claims presently recite to “a particular state,” thereby obviating this basis for rejection. Reconsideration is respectfully requested.

#### **E. Conditional Language (Claims 5 & 33)**

The Office Action cited to the use of conditional language in Claims 5 and 33 as a basis for the 35 U.S.C. § 112 rejection. These claims presently include no such language, thereby obviating this basis for rejection. Reconsideration is respectfully requested.

#### **F. Omission of Essential Steps, Elements, or Relationships (Claims 11–20, 39–47)**

The Office Action proceeds in its 35 U.S.C. § 112 analysis by listing additional “essential steps/elements/structural cooperative relationships of elements” it believes to have been omitted in various claims. Applicants traverse the rejection of these claims for the same reasons as explained in section IV.A above. For completeness, however, the individual bases for rejection stated in the Office Action are discussed below.

The Office Action alleges that Claims 11 and 39 omit the “step/element/necessary structural connection” of “‘of what’ the illegal states are to be specified.” However, the claims on their face are clear that the illegal states are of “network components or interactions between two or more components.” *See* Claims 1 and 29. There are no omitted steps, elements, or structural connections in Claims 11 and 39.

The Office Action alleges that Claims 12 and 40 omit the “step/element/necessary structural connection” of “‘of what’ the undesired states are to be specified.” However, the claims on their face are clear that the undesired states are of “network components or interactions between two or more components.” *See* Claims 1 and 29. There are no omitted steps, elements, or structural connections in Claims 12 and 40.

The Office Action alleges that Claims 13 and 41 omit the “step/element/necessary structural connection” of “‘of what’ the illegal states and undesired states are to be specified.” However, the claims on their face are clear that the illegal states and undesired states are of “network components or interactions between two or more components.” *See* Claims 1 and 29. There are no omitted steps, elements, or structural connections in Claims 13 and 41.

The Office Action alleges that Claims 15 and 43 omit the “step/element/necessary structural connection” of “‘of what’ the authorization violation and of what the authentication forgery is.” However, one skilled in the art would understand these terms, respectively, to refer

to a violation of authorization in access to a network component and a forgery of authentication in access to a network component. Nor are authorization violations and authentication failures, in and of themselves, novel concepts that require explanation to one skilled in the art. There are therefore no omitted steps, elements, or structural connections in Claims 15 and 43.

The Office Action alleges that Claims 16 and 44 omit the “step/element/necessary structural connection” of “‘of what’ the QoS degradation is.” However, one skilled in the art would understand that a QoS degradation refers to a degradation in QoS in communications between network components. Nor is QoS degradation, in and of itself, a novel concept that requires explanation to one skilled in the art. There are therefore no omitted steps, elements, or structural connections in Claims 16 and 44.

The Office Action alleges that Claims 17 and 45 omit the “step/element/necessary structural connection” of “‘of what’ the trends are.” However, one skilled in the art would readily recognize that *trends* refers to trends in a wide variety of well-known measurements of behavior in communications between network components. Nor is the concept of measuring trends in network performance, in and of itself, a novel concept that requires explanation to one skilled in the art. There are therefore no omitted steps, elements, or structural connections in Claims 17 and 45.

The Office Action alleges that Claims 18 and 46 omit the “step/element/necessary structural connection” of “‘of what’ the stable-behavior is and of what the threshold value is.” However, one skilled in the art would readily recognize that stable behavior in a threshold value refers to a variability that is within a desired limit for a threshold value. Furthermore, the present claims clarify that the threshold value is “‘of a particular trend’ in the network. There are therefore no omitted steps, elements, or structural connections in Claims 18 and 46.

The Office Action alleges that Claims 19 and 47 omit the “step/element/necessary structural connection” of “‘of what’ increases or decrease is of what the threshold value is.” However, the claims on their face explain that the increases and decreases are ‘of’ a threshold value. Furthermore, the present claims clarify that the threshold value is “‘of a particular trend’ in the network. There are therefore no omitted steps, elements, or structural connections in Claims 19 and 47.

There are therefore no omitted steps, elements, or structural connections in Claims 1–47. Reconsideration is respectfully requested.

#### **G. The term “The Occurrence” (Claims 20–26)**

The Office Action cites the use the term “the occurrence” as a basis for the 35 U.S.C. § 112 rejection, stating that it lacks antecedent basis. These claims presently include no such language, thereby obviating this basis for rejection. Reconsideration is respectfully requested.

#### **V. CLAIM REJECTIONS BASED ON 35 U.S.C. § 102**

As a preliminary matter, for this issue and many other issues, the Office Action does not specify exactly what in the cited references corresponds to or constitutes each element or feature of the claims. In an Office Action “the particular part relied on must be designated as nearly as practicable … The pertinence of each reference, if not apparent, must be clearly explained …” (MPEP §707, citing 37 C.F.R. §1.104(c)(2)), and “the particular figure(s) of the drawings(s), and/or page(s) or paragraph(s) of the reference(s), and/or any relevant comments briefly stated should be included.” (MPEP §707). The present citations to the references do not provide the Applicant with adequate notice or reasonable particularity with respect to the basis of the rejections. Instead, large portions of the references are simply identified in a non-specific way (e.g. entire columns of the cited references are cited as disclosing complicated features of Applicants’ invention, without explaining how they do so). As a result, the Applicants have had to engage in guesswork to determine the basis of the rejection.

Applicants’ arguments below are based upon their best efforts to understand the intent of the Office Action.

#### **A. Anticipation under 35 U.S.C. § 102(e): Kirti et al.**

Claims 1–47 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,076,543 to Kirti et al. (hereinafter “*Kirti*”). Applicants traverse the rejection. Reconsideration is respectfully requested.

To anticipate under 35 U.S.C. § 102(e), a reference must show all elements, steps or limitations of a claim, arranged as in the claim. An anticipation rejection is unsupported or overcome if a reference is missing even one element, step or limitation. *See Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548, 220 USPQ 193, 198 (Fed. Cir. 1983).

## **INDEPENDENT CLAIM 1**

Claim 1 as set forth in the listing of claims clarifies that the method features “specifying state and state transitions for a component, wherein specifying includes specifying composite state transitions.” For example, if “nearly busy” and “busy” were specified as states for a network component, a state transition could be specified to indicate the transition of that network component from the “nearly busy” to “busy” state.

Kirti, on the other hand, does not disclose specifying state transitions, much less composite state transitions. In fact, it is not clear how the criteria in Kirti are specified at all; however, it appears that the criteria relate only to threshold-defined states of network components. *See, e.g.*, Kirti at col. 8, lines 36–48 (“criteria may include specified minimums, maximums, averages, etc.”).

For at least the foregoing reason, Kirti does not disclose every element of independent Claim 1. Reconsideration is respectfully requested.

## **DEPENDENT CLAIMS 2–19**

Claims 2–19 depend from Claim 1, and include each of the above-quoted features by dependency. Thus, Claims 2–19 also lack at least one feature found in Kirti, and therefore Kirti does not anticipate Claims 2–19. Reconsideration is respectfully requested.

In addition, each of Claims 2–19 recites at least one feature that independently renders it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.

## **INDEPENDENT CLAIM 20**

Claim 20 as set forth in the listing of claims clarifies that the system features “each network component configured to spontaneously generate notifications when specified states and state transitions occur involving the network component.” For example, if a network component entered into a “busy” state, it would spontaneously generate a notification to the network of its state.

Kirti, on the other hand, does not disclose a network component spontaneously generating notifications about its own states and state transitions. Indeed, the Office Action does not allege that Kirti discloses such a feature. While Kirti does disclose a collector that, according to a schedule, generates notifications about other network components, Kirti does not disclose network components that spontaneously advertise state or state transitions about themselves. See, e.g., Kirti at col. 8, lines 1–11.

Furthermore, as discussed in relation with Claim 1, Kirti does not disclose basing notifications on state transitions or composite state transitions.

For at least the foregoing reason, Kirti does not disclose every element of independent Claim 20. Reconsideration is respectfully requested.

#### **DEPENDENT CLAIMS 21–26**

Claims 21–26 depend from Claim 20, and include each of the above-quoted features by dependency. Thus, Claims 21–26 also lack at least one feature found in Kirti, and therefore Kirti does not anticipate Claims 21–26. Reconsideration is respectfully requested.

In addition, each of Claims 21–26 recites at least one feature that independently renders it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.

#### **INDEPENDENT CLAIM 27**

Claim 27 as set forth in the listing of claims clarifies that the system features “each an agent configured to examine said network components to determine whether specified states or state transitions, including composite state transitions.”

As discussed in relation with Claim 1, Kirti does not disclose basing notifications on state transitions or composite state transitions.

For at least the foregoing reason, Kirti does not disclose every element of independent Claim 27. Reconsideration is respectfully requested.

### **DEPENDENT CLAIM 28**

Claim 28 depends from Claim 27, and include each of the above-quoted features by dependency. Thus, Claim 28 also lack at least one feature found in Kirti, and therefore Kirti does not anticipate Claims 28. Reconsideration is respectfully requested.

In addition, Claim 28 recites at least one feature that independently renders it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.

### **INDEPENDENT CLAIM 29**

Independent Claim 29 also recites the features quoted for Claim 1, although Claim 29 is expressed in another format. Claim 29 has all the features described above for Claim 1, and therefore Claim 29 is allowable over Kirti for the same reasons given above for Claim 1. Reconsideration is respectfully requested.

### **DEPENDENT CLAIMS 30–47**

Claims 30–47 depend from Claim 29, and include each of the above-quoted features by dependency. Thus, Claims 30–47 also lack at least one feature found in Kirti, and therefore Kirti does not anticipate Claims 30–47. Reconsideration is respectfully requested.

In addition, each of Claims 30–47 recites at least one feature that independently renders it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.

## B. Anticipation under 35 U.S.C. § 102(e): Moran et al.

Claims 1–47 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,801,940 to Moran et al. (hereinafter “*Moran*”). Applicants traverse the rejection. Reconsideration is respectfully requested.

To anticipate under 35 U.S.C. § 102(e), a reference must show all elements, steps or limitations of a claim, arranged as in the claim. An anticipation rejection is unsupported or overcome if a reference is missing even one element, step or limitation. *See Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548, 220 USPQ 193, 198 (Fed. Cir. 1983).

### INDEPENDENT CLAIM 1

Claim 1 as set forth in the listing of claims clarifies that the method features “specifying state **and state transitions** for a component, wherein specifying includes specifying **composite state transitions**.” For example, if “nearly busy” and “busy” were specified as states for a network component, a state transition could be specified to indicate the transition of that network component from the “nearly busy” to “busy” state.

Moran, on the other hand, does not disclose specifying state transitions, much less composite state transitions. The Office Action cites column 5 of Moran as containing this element. However, Applicant sees no feature of Moran in column 5, or any other part of the Moran, that corresponds to state transitions. Moran, in column 5, describes modules and monitoring segments, but not specifying states nor generating alerts when states change, as claimed.

For at least the foregoing reason, Moran does not disclose every element of independent Claim 1. Reconsideration is respectfully requested.

### DEPENDENT CLAIMS 2–19

Claims 2–19 depend from Claim 1, and include each of the above-quoted features by dependency. Thus, Claims 2–19 also lack at least one feature found in Moran, and therefore Moran does not anticipate Claims 2–19. Reconsideration is respectfully requested.

In addition, each of Claims 2–19 recites at least one feature that independently renders it patentable. However, due to the fundamental differences already identified, to expedite the

positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.

#### **INDEPENDENT CLAIM 20**

Claim 20 as set forth in the listing of claims clarifies that the system features “each network component configured to **spontaneously generate notifications** when specified states and state transitions occur **involving the network component**.” For example, if a network component entered into a “busy” state, it would spontaneously generate a notification to the network of its state.

Moran, on the other hand, does not disclose a network component spontaneously generating notifications about its own states and state transitions. Indeed, the Office Action does not allege that Moran discloses such a feature.

Furthermore, as discussed in relation with Claim 1, Moran does not disclose basing notifications on state transitions or composite state transitions.

For at least the foregoing reason, Moran does not disclose every element of independent Claim 20. Reconsideration is respectfully requested.

#### **DEPENDENT CLAIMS 21–26**

Claims 21–26 depend from Claim 20, and include each of the above-quoted features by dependency. Thus, Claims 21–26 also lack at least one feature found in Moran, and therefore Moran does not anticipate Claims 21–26. Reconsideration is respectfully requested.

In addition, each of Claims 21–26 recites at least one feature that independently renders it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.

## **INDEPENDENT CLAIM 27**

Claim 27 as set forth in the listing of claims clarifies that the system features “each an agent configured to examine said network components to determine whether specified states or state transitions, including composite state transitions.”

As discussed in relation with Claim 1, Moran does not disclose basing notifications on state transitions or composite state transitions.

For at least the foregoing reason, Moran does not disclose every element of independent Claim 27. Reconsideration is respectfully requested.

## **DEPENDENT CLAIM 28**

Claim 28 depends from Claim 27, and includes each of the above-quoted features by dependency. Thus, Claim 28 also lack at least one feature found in Moran, and therefore Moran does not anticipate Claims 28. Reconsideration is respectfully requested.

In addition, Claim 28 recites at least one feature that independently renders it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.

## **INDEPENDENT CLAIM 29**

Independent Claim 29 also recites the features quoted for Claim 1, although Claim 29 is expressed in another format. Claim 29 has all the features described above for Claim 1, and therefore Claim 29 is allowable over Moran for the same reasons given above for Claim 1. Reconsideration is respectfully requested.

## DEPENDENT CLAIMS 30-47

Claims 30-47 depend from Claim 29, and include each of the above-quoted features by dependency. Thus, Claims 30-47 also lack at least one feature found in Moran, and therefore Moran does not anticipate Claims 30-47. Reconsideration is respectfully requested.

In addition, each of Claims 30-47 recites at least one feature that independently renders it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.

### VI. CONCLUSION

It is respectfully submitted that all of the pending claims are in condition for allowance and the issuance of a notice of allowance is respectfully requested. If there are any additional charges, please charge them to Deposit Account No. 50-1302.

The Examiner is invited to contact the undersigned by telephone if the Examiner believes that such contact would be helpful in furthering the prosecution of this application.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

Date: September 24, 2007

/KarlTRees#58983/

Karl T. Rees, Reg. No. 58,983

2055 Gateway Place, Suite 550  
San Jose, CA 95110  
(408) 414-1233  
Facsimile: (408) 414-1076

#### CERTIFICATE OF TRANSMISSION VIA EFS-WEB

Pursuant to 37 C.F.R. 1.8(a)(1)(ii), I hereby certify that this correspondence is being transmitted to the United States Patent & Trademark Office via the Office electronic filing system in accordance with 37 C.F.R. §§1.6(1)(4) and 1.8(a)(1)(i)(C) on the date indicated below and before 9:00 PM PST.

Submission date: September 24, 2007 by /ChristopherJPalermo#42056/